

**LOFTUS URBAN DISTRICT COUNCIL.**

**COMBINED DISTRICT COUNCILS**

**GUISBOROUGH UNION.**

---

---

**REPORT**

**FOR THE YEAR 1913**

**OF THE**

**MEDICAL OFFICER OF HEALTH,**

**W. W. STAINTHORPE, M.D. C.M., D.P.H.**



## To the Chairman and Members of the Loftus Urban Council.

---

GENTLEMEN,

I have pleasure in submitting for your consideration my Report for the year ending December 31st, 1913.

Loftus district embraces Loftus (proper), Skinningrove, part of Carlin-How, Liverton Mine village, and Old Liverton village. Skinningrove lies in a narrow ravine through which flows a stream, and is bounded on the north by the sea. Loftus stands on the hill to the east of the ravine, and Carlin How on that to the west. Liverton Mine village lies on a hill to the south-west of Loftus, and Old Liverton village is situate inland about two miles from the coast.

Loftus lies on the lower oolite, estuarine beds consisting of sandstone and shale.

Carlin How lies on the upper lias, grey shale.

Skinningrove, the north part is on the lower lias shales, the south part on the middle lias (marly shales).

Liverton Mine lies on the lower oolite shales, grey limestone series.

Liverton Village lies on the lower oolite, estuarine beds.

The bulk of the adult male population is engaged in iron-stone mining, the smelting of iron-stone, the making of steel, and work connected therewith.

### Birth and Mortality Rates.

Population estimated at middle of year ... 9300.

Births (corrected) ... 279 (133 males, 146 females).

Birth rate ... 30·0.

Deaths (corrected) ... 130 (83 males, 47 females).

Death rate ... 13·97.

Infectious diseases death rate (tuberculosis excluded) 1·62.

Tuberculosis death rate ... 0·54.

Diarrhoeal diseases death rate 0·9.

### Inspections.

Nuisances ascertained to exist during visits made by the Inspector are either reported by entry in his journal, or the particulars are forwarded to the owner or agent of the property, or to me. Those which come under my own observation are either reported direct to the Council or particulars are forwarded to the Inspector for entry in his journal, or are communicated to the owner or his agent. The Inspector's journal and my report are placed before the Council (or a Committee) at each of its monthly meetings. The several items in the journal and the report are considered and instructions are given for the serving of the necessary notices. In most cases an informal notice is issued, if not complied with the matter is reported to the Council.

Number of Inspections under Housing Acts ...	310
Ditto       under Factory and Workshop Act	88
Ditto       under Dairies and Cowsheds Order	36
Ditto       of slaughterhouses ... ...	152
Ditto       of premises where food is prepared	175
Ditto       of common lodging-houses ...	16
Number of visits under Notification Act ...	146
Number of notices sent to Teachers (re infectious cases) ...	263
Number of premises disinfected ... ...	113
Number of informal notices served ... ...	92
Number of statutory notices served ... ...	9
Number of notices complied with ... ...	88
Number of unexpired notices ... ...	1

## Sewerage.

The sewage of Loftus proper (excluding a few houses in North Terrace outside the town), Skinningrove, Liverton Mines cottages and part of Carlin-How discharges into the sea. A sewer is at present in course of construction which when complete will convey the sewage from part of Carlin-How and from houses in the same place which are in the Skelton and Brotton district into the Loftus main sewer thence to sea. The Surveyor has received instructions to report upon the cost of re-laying the sewer at Liverton Village.

## Stream, pollution of.

Owing to mining subsidence a break occurred in the main sewer running along the side of the beck in Deepdale Wood, causing pollution of the stream. It was considered desirable to postpone the relaying of this sewer till the spring of the present year as carrying out of the work during the winter months would be attended by great difficulty.

## Scavenging.

Number of fixed ashpits in combination with conveniences	...	180.
ditto not in combination	ditto	127.
Number of moveable receptacles of iron with covers	...	95.
ditto of other forms	...	1156.
Number of water closets ...	...	208.

(Note :—the 1156 receptacles are used both for nightsoil and house refuse).

During the two years 1912, 1913, fifty-three middens were replaced by moveable receptacles.

The scavenging is carried out under contract; pails are emptied once a week, fixed receptacles once a fortnight. House refuse is conveyed to two tips, one of which is 250 feet from inhabited houses, the other 300 feet. The refuse is not sorted, but permission is given to one man (on payment of a small sum) to remove old iron, &c. Nightsoil is conveyed direct on to land. Tradesmen make their own arrangements for the removal of trade refuse; the same remark applies to the removal of animal manure by keepers of horses, cows, &c.

The cleansing of the streets is carried out by the Council's employees under the supervision of the Surveyor.

During the year four pail closets were replaced by water-closets, three fixed receptacles for nightsoil were re-placed by moveable receptacles, water-closets were erected in twenty-seven new houses and one pail closet in a new house.

## Water Supply.

All the houses in Carlin How and Skinningrove are supplied by the Cleveland Water Company. Liverton Mine cottages from covered tank (fed by spring) to each house. Liverton Village from tank (fed by spring to stand pipes). About three-fourths of Loftus proper by the Cleveland Company—about half the remainder from covered tank (fed by spring): detached houses have wells.

In the higher parts of Loftus the pressure by gravity was insufficient to maintain a constant supply of water during the day. By the erection of two tanks, one at East Loftus the other at Seymour Hill, each holding 7000 gallons a constant supply is now provided.

Hitherto no action has been taken to ascertain whether or not the waters used for domestic purposes are plumbo-solvent. It is proposed to test the waters from time to time for this purpose.

## Milk Supply.

Cowkeepers on the Register	...	...	19
Dairymen	...	...	4
Number of inspections made	...	...	30

As a rule the cowsheds are maintained in a clean condition and the periodical lime-washing carried out. Two notices were served under the Regulations.

### Foods,—inspection of premises where prepared or stored.

The bake houses and premises on which sausages, ice-cream, and aerated waters are made, and fish fried, are inspected under the Factory and Workshop Act; 175 such inspections were made. Food stuffs hawked in carts were also inspected.

There are nine licensed and registered slaughterhouses in the district (two are not in use); the inspections of these numbered 152;—149 carcases were examined, none found unfit for food. A notice to repair the floor of a slaughterhouse was served and complied with.

### Elementary Schools :—Table of particulars re Water Supply, Sanitary Conveniences, &c.

School.	Is Water on Premises ?			Sanitary Conveniences.	Yard Pervious or Impervious.
Loftus Mixed	...	Yes	...	W.Cs.	...
Loftus Infant	...	Yes	...	Earth Closets	...
Loftus R. C.	...	Yes	...	W.Cs.	...
Loftus New	...	Yes	...	W.Cs	...
Liverton Mines	...	Yes	...	Pails	...
Liverton Village	...	No	...	Ordinary	...
Skinningrove Mixed	...	Yes	...	W.Cs.	...
Skinningrove Infant	...	Yes	...	W.Cs.	...

### Common Lodginghouse.

There are two licensed common lodginghouses both owned and supervised by one person. Sixteen visits were made to these during the year. They are maintained in clean condition.

### Housing, Town Planning, &c., Act, 1909.

Number of dwelling-houses inspected under the Housing, Town Planning &c., Act, 1909	...	...	...	...	...	129
Number of dwelling-houses considered unfit for habitation	...	...	...	...	...	nil
Number of representations made with a view to making closing orders	...	...	...	...	...	nil
Number of closing orders made	...	...	...	...	...	nil
Number of dwelling-houses in which the defects were remedied without the making of closing orders	...	...	...	...	...	nil
Number of dwelling-houses made fit after making of closing orders	...	...	...	...	...	nil
Number of notices served to make houses fit for habitation	...	...	...	...	...	nil

#### Condition of houses inspected as to

Lighting.	Air Circulation.			Cleanliness.		
	Good	Fair	Bad	Clean	Fair	Not clean
Good	...	121	Good	...	118	Clean ... 64
Fair	...	6	Fair	...	1	Fair ... 57 See Note.
Bad	...	2	Bad	...	nil	Not clean ... 7
						Dirty ... 1

Note.—The word "Fair" is used when the conditions are such as to leave room for improvement: "Not clean" where the room for improvement is considerable: "Dirty" where it is desirable to give notice under Section 46 of the Public Health Act, 1875.

## Particulars of defects found :—

House yards in defective condition	...	...	18
Damp or defective walls	...	...	32
ditto ditto floors	...	...	35
ditto ditto pantries	...	...	6
Defective sanitary conveniences	...	...	4
Defective roofs	...	...	9
Defective windows	...	...	20
Other defects	...	...	32

## Other particulars :—

Number of houses containing two families	...	7
Ditto with one bedroom	...	2
Ditto with two bedrooms	...	56
Ditto with three bedrooms	...	70
Ditto with four bedrooms	...	1=129
Average number of persons per house	...	5·25
Ditto bedroom	...	2·1

In some of the inspections made under the Act I accompanied the Sanitary Inspector.

### House Accommodation.

The particulars obtained during inspections made under the Housing, Town Planning, &c., Act, indicate an improvement in house accommodation. In the houses inspected the average number of persons per house was 5·25; in 1912 it was 6·05. In 1912 of 156 houses inspected seventeen contained two families each; of the 129 houses inspected in 1913 seven were found to house two families. The average number of persons per bedroom was 2·1.

The number of houses erected during the year was 27: seventeen are in course of construction. Plans for other forty-four dwellings were laid before the Council and approved. In that part of Carlin-How which is in the Skelton & Brotton district a large number of houses have recently been built and others are in course of erection. Practically the whole are or will be occupied by persons engaged in work in the Loftus district.

It does not always follow that the occupation of a house by two families gives rise to over-crowding. Nor does it always follow that it indicates lack of house accommodation, in some cases motive of economy is the cause.

(Note—since the above was written plans for thirty houses to be erected in the district have been passed by the Council).

### Infectious Diseases.

There are certain factors influencing the spread of the infectious diseases of childhood which require fuller appreciation than is accorded them at present. Given two districts or two parts of a district, A and B. Let the child population in A be greater proportionately than in B, then in A the number of cases will, other things being equal, be larger than in B. Let there also be in A the existence of some condition (not present in B) which favours the spread of the disease, such as the aggregation of a large number of houses of one type the occupants of which intermix freely with their neighbours, then the greater prevalence of the disease in A can be readily understood and does not require for its explanation the assumption that it results from some local insanitary condition. It is very important that the public should understand the conditions which lead to the dissemination of infectious diseases. Anything which fosters the belief that this is due to defects in sanitary arrangements induces carelessness. It is natural that it should be argued that if such defects are the cause, it is useless to take the usual precautions as to isolation, &c.

On receipt of a notification the following information is obtained and entered on a Form :—the day and Sunday schools attended by children living in the infected house, the occupation of the householder and of other adults, the milk supply, the number of occupants, the

number of rooms. Where it appears necessary or desirable I visit the infected house. Disinfection of bedrooms is carried out by the Council's workmen under the supervision of the Sanitary Inspector.

### Scarlet Fever.

Number of cases notified	...	70.
Number of deaths	...	3.
Case mortality	...	4·2 per cent.

Of the seventy cases reported thirty-seven occurred during the first quarter of the year, seventeen in the second, thirteen in the third, and three in the last quarter. Thirty-five cases occurred in Loftus in eighteen houses, twenty-one at Liverton Mines in fifteen houses, ten at Carlin-How in nine, and four in Skinningrove in four houses. The disease was not confined to any particular part of the district at any one time.

When several cases of scarlet fever occur among children grouped together in a school it is probable that in many instances the medium of infection was a child suffering from the disease in its initial stage. It is not uncommon to be informed when making enquiries at school that such and such a child was sent home as it appeared to be feverish or was sick. Assuming that the child was subsequently found to be suffering from the fever it can readily be understood that it may have affected children sitting near it.

### Diphtheria.

It does not follow when the specific bacilli of diphtheria invade a body that the disease will manifest itself (if ever it does so) after the ordinary incubation period. Diphtheria is first a local disease then a general. If the local conditions, that is the state of the mucous membrane of the mouth, throat, nose, &c., are unfavourable to the growth of the bacilli at the time of invasion they fail to produce the disease. But the bacilli may remain in contact with the membrane for a considerable time ready to take effect should the conditions change in such a way as to favour their growth and the production and absorption of the poison which renders the disease general.

Number of cases notified	...	33.
Number of deaths	...	1.
Case rate mortality	...	3 per cent.

Of the thirty-three cases notified sixteen occurred in Loftus in fourteen houses, ten in ten houses in Carlin How, and seven in four houses in Skinningrove. Twenty occurred during the first quarter of the year, five in the second, four in the third, and four in the last quarter. Twenty-one of the patients were removed to the Sanatorium. There is little doubt that the removal to the hospital of the majority of the patients prevented the disease becoming epidemic. The mortality rate, three per cent. of the cases reported, is low. Eighty-nine 'swabs' from suspected cases, from convalescents and from contacts were submitted for bacteriological examination; of these twenty-three were found positive, sixty-three negative, three were stated to be 'contaminated.' Of the eighty-nine 'swabs' forty-five were from patients recovering from the disease and were examined for the purpose of ascertaining whether or not these patients were infection free.

At one period several cases occurred in rapid succession among children attending the Loftus Infant school. Twice I visited this school and endeavoured to trace the infecting medium but without success: I thereupon advised closure of the school for one month with the result that the disease ceased to spread. The pencils used by the scholars were bacteriologically examined and though the specific bacilli were not found thereon allied bacilli (Hoffman's) were. I communicated with the Local Education authority recommending that such steps be taken as would prevent any one child's pencils, &c., being used by any other child. That authority provided paper bags for the purpose.

### Measles.

During the second half of the year measles was epidemic in Loftus spreading thence to Liverton Mine Cottages and Skinningrove. The Loftus Infant school was closed from May 10th until July 21st. The Loftus Roman Catholic, the Liverton Mines, and the Skinningrove schools were closed one week prior to the ordinary time of closure for the summer holiday. The disease was of a severe type. Eleven deaths were certified as due to it.

Much difference of opinion exists as to whether or not children living in a house infected with measles should be permitted to attend school. In his Supplement to the Annual Report of the Local Government Board for the year 1912—1913 Dr. Newsholme (the Chief Medical Officer of that Board) says " Not infrequently objection is raised to the attendance at school of children " who have had measles and are over the age of attendance in infant schools, who come from " households in which there is a case of measles. Such attendance under the common conditions " of town life is justifiable, so long as it remains true that most of the children above the infant " classes have already had measles. All clinical evidence points to the conclusion that measles " is infectious chiefly by direct conveyance from the patient, and that its conveyance by fomites " (clothing, etc.), is negligible."

### Enteric Fever.

The total number of cases of enteric fever notified in the whole of the districts in the Union was four. Three of these occurred in the Redcar district, the fourth in the Skelton and Brotton. One of the three in Redcar apparently was contracted from one of the other two in that district. The source of infection of the others I was unable to trace definitely:—one was possibly due to infected shell-fish, one probably contracted out of the district.

### Tuberculosis.

The following Table shows the number of cases, &c., notified in the several districts.

District.	Pulmonary.	Other Forms	Total.	Males.	Females.	Rate per 1000 of the population.
Guisborough Rural	... 11	6	17	7	10	2·16
Guisborough Urban	... 12	8	20	10	10	2·81
Loftus Urban	... 11	4	15	11	4	1·61
Redcar Urban	... 18	10	28	15	13	2·43
Saltburn Urban	... 2	4	6	2	4	1·71
Skelton & Brotton Urban	15	20	35	24	11	2·18
Totals, &c.	... 69	52	121	69	52	2·18

The Public Health (Tuberculosis) Regulations, 1912, which came into force February 1st, 1913, require the notification of cases of tuberculosis of all forms. The medical officer of health or an officer of the Local Authority acting under the instructions of the medical officer of health is required to make enquiries and take such steps as are necessary or desirable for investigating the source of infection, for preventing the spread of infection and for removing the conditions favourable to infection. The Local Government Board suggest that the Tuberculosis Officer should undertake the duties, or some of them, of the medical officer of health. As no such officer has as yet been appointed I have had no assistance in carrying out the duties.

For the better appreciation of the difficulty met with in endeavouring to trace the source of infection it is desirable to make a short statement of what is known as to the cause of tuberculosis and of the means by which it is disseminated. The disease is due to the invasion of

the body, generally by inhalation or ingestion, of the specific bacilli. The time the symptoms manifest themselves bears no relation to the time of invasion. It is probable that in some instances the invasion is accompanied by symptoms of an indefinite character. In one individual the bacilli may be overcome and destroyed, in another they may be imprisoned in some organ or tissue of the body remaining there in a dormant state ready to resume activity if by any means they are liberated. It will thus be understood that the true source of infection may be difficult to trace.

The sputum of a patient suffering from pulmonary tuberculosis contains the specific bacilli:—infection may be contracted therefrom by the inhalation or ingestion of fine particles of the dried sputum. The disease may be contracted by the use of tuberculous milk or meat:—the information at present possessed renders it impossible to say to what extent the one or the other is responsible.

Of the 121 houses in which tuberculosis was notified to exist 105 were visited by me, to 29 subsequent visits were paid. In by far the larger number of cases it was impossible to arrive at any conclusion as to the source of infection.

In each of thirteen instances it was ascertained that the disease had been contracted before the patient had come into the district. In each of five cases it is probable that the infection proceeded from a previous case in the house. Two patients, a soldier and an ex-soldier, apparently became infected whilst serving in the Army. Four either contracted the disease whilst resident in asylums or it was latent in them at the time of admission.

**Predisposing Causes.** Post-mortem examinations show that very many persons who have died from diseases other than tuberculosis have at one time or another been invaded by the tubercle bacilli:—the many are invaded, the few (comparatively) become the prey;—the many overcome the foe the few are unable to do so. The inability to overcome appears in some instances to be inherited, in others it results from living under conditions inimical to health generally. It is assumed therefore that whatever promotes the attainment of ‘the sound mind in the sound body’ increases resisting power. Soundness of mind, using that term in its broadest sense, is an important factor, a factor which is not sufficiently appreciated. There is little doubt that grief and worry lower the vital power considerably, probably to a greater extent even than unhealthy environment.

In one third of the cases enquired into it was ascertained that one or other near relative was suffering from or had succumbed to consumption. Could precise information on the point have been obtained there is little doubt that this proportion would have been found larger. The cause of death of a relative is not always known especially if that relative has died during the childhood of the patient whose case is under enquiry. Nor is it to be overlooked that whilst death from pulmonary tuberculosis (consumption) may be known to members of the family, death from some other form of the disease is not so likely to be.

Of the predisposing causes the chief are:—

- Deficient nutrition resulting from unsuitable or improperly cooked food or its insufficiency.
- Inefficient bedroom ventilation.
- Inadequate or excessive clothing.
- Neglect of minor ailments.
- Prolonged physical or mental strain.
- Bad home conditions causing neglect of children.
- Alcoholic or other excesses.
- Anxiety or grief.
- Unhealthy environment.

Of the 105 houses visited by me it was found that in 72 the environment was good, in 32 it was fair, in one bad:—in 62 the home conditions were good, in 28 they were fair, in 15 bad. In the 15 mentioned there were signs of general neglect. There was no indication that the disease unduly affected persons following any particular employment. Of the male adult patients ten were miners, five labourers, three clerks, three engineers, two masons, two draughtsmen:—

the employment of the remainder varied. Of the female adults four were or had been in domestic service,—twenty-three were 'housewives.' Two members of one family were attacked the disease manifesting itself in each at such time as precluded any probability that the one contracted it from the other, moreover they resided in different districts and had not, previous to being attacked seen each other for some time. Many years ago this family came under my observation owing to the very bad home conditions which existed, conditions which undoubtedly contributed very materially to the members mentioned becoming a prey to the disease.

**Action Taken.**— Such advice was given in each case as the circumstances called for. Cuspidors and cards of instructions were supplied where needed. Where insanitary conditions existed (in very few instances were such found) steps were taken to have them remedied. In such cases as appeared desirable the names and addresses of school children living in the houses were forwarded to the Medical Inspector of school children in order that they might receive special attention. Bedrooms occupied by those suffering from tuberculosis were disinfected after the death or removal of the patient. In a few instances it was found either unnecessary or undesirable for various reasons to take any action.

Of the persons notified to be suffering from tuberculosis forty-two were insured (under the National Insurance Act) and forty-seven were the dependents of insured. Fourteen of the insured received Sanatorium treatment, one Domiciliary treatment. Of the fourteen mentioned four were discharged after periods varying from seventeen days to ten weeks:—these four died soon after discharge. Three improved after eight weeks treatment and are now following their usual employment. Two on discharge left the district,—their condition is unknown. The condition of two remains the same. One subsequently was admitted to another sanatorium,—one is at present very ill,—one is still in the sanatorium.

The number of deaths resulting from tuberculosis in the several districts was as follows:—

	Pulmonary.	Other forms.	Total.
Guisborough Rural	...	8	1 9
Guisborough Urban	...	8	4 . 12
Loftus Urban	...	3	2 5
Redcar Urban	...	10	7 17
Saltburn Urban	...	2	1 3
Skelton & Brotton Urban	...	8	7 15

There are certain desiderata in the treatment and prevention of tuberculosis (and these cannot be divorced) which require very careful consideration,—these are:—

- (1) The exercise of the greatest possible care in the selection of cases sent to sanatoria; unless this be done this one form of treatment will fall into disrepute.
- (2) The provision of a hospital for those in a hopeless condition whose return home would be a menace to the health of the family.
- (3) The provision of some arrangement for the after-care of patients discharged from sanatoria.

Infectious Diseases (Notification) Act.

Cases of Infectious Disease notified during the year 1913.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.						TOTAL CASES NOTIFIED IN EACH LOCALITY IN THE DISTRICT.			TOTAL CASES REMOVED TO HOSPITAL.		
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 upwards.	Cartm. How.	Skinningrove.	Lofthus, &c.	
Diphtheria (including Membranous croup)	33	4	28	1					10	7	16	21
Erysipelas	5						5			3	1	1
Scarlet Fever	70		26	36	5	3			10	4	21	35
Pulmonary Tuberculosis	11		1	1	2	6	1			3	2	6
Other forms of Tuberculosis	4		1	2	1					3	1	
Totals	123	32	67	8	10	6	"	"	20	20	24	59
												21

No case of any of the following diseases was notified :—  
small-pox, typhus fever, enteric fever, puerperal fever, poliomyelitis, cerebro-spinal meningitis.

### Factory and Workshop Act.

There are on the Register 11 factories and 61 workshops, as follows :—

Factories :—				Workshops :—			
Foundry	...	...	1	Dressmakers	...	...	7
Sawmill	...	...	1	Bakers	...	...	7
Flour-mill	...	...	1	Shoemakers	...	...	8
Carpenters	...	...	2	Carpenters	...	...	9
Aerated Waters	...	...	2	Milliners	...	...	4
Steel works, &c	...	...	1	Tailors	...	...	4
Gas works	...	...	1	Blacksmiths	...	...	3
Cycle repairing	...	...	1	Fried-fish shops	...	...	4
Sausage making	...	...	1	Printers	...	...	2
			—	Ice-cream makers	...	...	3
			11	Saddler	...	...	1
				Sausage-maker	...	...	5
				White-smith	...	...	1
				Plumber	...	...	1
				Bottling	...	...	2
							—
							61

Inspections made :—67 by Sanitary Inspector, 21 by Medical Officer of Health.

Eleven notices were issued under the Act to remedy defects. Of these eight were for the provision of sanitary conveniences as required by the Act.

### Skinningrove Port.

The jetty at this port is the property of the Skinningrove Iron Company and is used by that Company only. The three steamships trading between that port and others belong to the Company. No food of any kind is landed thereat. Two of the ships were inspected by me.

Table of Birth and Mortality Rates  
in the several Districts in the Union.

DISTRICT.	Births :—		Deaths registered in District.		Deaths of Non-residents registered in the District.		Deaths of Residents not registered in the District.		Deaths of Infants under 1 year of age.		Infant Mortality Rate.		Total number of Deaths at all ages.		Infectious Diseases Death Rate (excluding tuberculosis).		Tuberculosis Death Rate.		Diarrhoeal Diseases Death Rate.	
	Uncorrected number.	Corrected number.	Birth Rate.	Death Rate.	Deaths registered in District.	Deaths of Non-residents registered in the District.	Deaths of Residents not registered in the District.	Deaths of Infants under 1 year of age.	Infant Mortality Rate.	Total number of Deaths at all ages.	Infant Mortality Rate.	Total number of Deaths at all ages.	Infant Mortality Rate.	Total number of Deaths at all ages.	Infant Mortality Rate.	Total number of Deaths at all ages.	Infant Mortality Rate.	Total number of Deaths at all ages.	Infant Mortality Rate.	
Guisborough Rural	... 7860	190	24.17	119	15.13	2	7	17	89.4	124	15.77	1.14	1.14	Nil	Nil	Nil	Nil	Nil	Nil	
Guisborough Urban	... 7100	214	29.71	114	16.05	16	3	22	109.0	101	14.22	1.25	1.69	0.14	0.14	0.14	0.14	0.14	0.14	
Loftus Urban	... 9300	279	30.00	121	13.01	0	9	37	132.6	130	13.97	1.62	0.54	0.9	0.9	0.9	0.9	0.9	0.9	
Redcar Urban	... 11500	256	22.46	142	12.84	6	13	28	108.5	149	12.95	1.04	1.21	0.52	0.52	0.52	0.52	0.52	0.52	
Saltburn Urban	... 3500	53	15.08	36	10.28	4	7	5	94.4	39	11.14	0.86	0.86	Nil	Nil	Nil	Nil	Nil	Nil	
Skelton & Brotton Urban	... 16000	463	29.06	186	11.62	1	12	58	124.7	197	12.31	0.56	0.93	0.62	0.62	0.62	0.62	0.62	0.62	
Totals and Averages	... 55260	1455	1456	26.34	718	12.99	29	51	167	114.6	740	13.39	1.04	1.10	0.47	0.47	0.47	0.47	0.47	0.47

**Table III.**  
**Causes of, and Ages at Death during the year 1913.**

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.								
	All ages.	Under 1 year.	1 and under 2 years	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.
1	2	3	4	5	6	7	8	9	10
All causes	{ Certified	All							
	Uncertified								
1. Enteric Fever	...	...							
2. Small Pox	...	...							
3. Measles	...	...	11	3	5	3			
4. Scarlet Fever	...	...	3			2	1		
5. Whooping Cough	...	...							
6. Diphtheria and Croup	...	...	1			1			
7. Influenza	.	..	2				1		1
8. Erysipelas	...	...							
9. Phthisis (Pulmonary Tuberculosis)	...	3					1	2	
10. Tuberculous Meningitis	...								
11. Other Tuberculous Diseases	...	2						2	
12. Cancer, malignant disease	...	5						3	2
13. Rheumatic Fever	..	...							
14. Meningitis	...	...							
15. Organic Heart Disease	...	7				1		1	4
16. Bronchitis	...	...	3	1				1	1
17. Pneumonia (all forms)	...	4			1			1	1
18. Other diseases of respiratory organs	...	1							1
19. Diarrhoea and Enteritis	...	9	4	3				1	1
20. Appendicitis and Typhlitis	...	1					1		
21. Cirrhosis of Liver	...	...	2					1	1
21a. Alcoholism	...	...							
22. Nephritis and Bright's Disease	...	3						1	2
23. Puerperal Fever	...	...							
24. Other accidents and diseases of Pregnancy and Parturition	...	1						1	
25. Congenital Debility and Malformation, including Premature Birth	...	15	15						
26. Violent Deaths, excluding Suicide	...	7					2	2	2
27. Suicide	...	2						1	1
28. Other Defined Diseases	...	48	14	2		1		3	7
29. Diseases ill-defined or unknown									21
	180	37	10	7	3	5	16	20	32

### Causes of death during the year.

The Table in which particulars are given of the number of deaths from the causes mentioned therein needs little comment. The number (11) from measles is large; the epidemic which prevailed was unusually severe. Comparing the deaths from the following causes with the average per annum during the previous ten years it is found that the number from tuberculosis was much below the average,—from cancer about the average,—from bronchitis and pneumonia much below,—from diarrhoeal diseases much above. The prevalence of diarrhoea depends to a very large extent upon seasonal conditions; during the ten years 1903—1912 the number per year varied from nine to nil.

### Infant Mortality.

Over twenty-two per cent. of the deaths in the Guisborough Union during the year occurred among infants (under one year of age). There is no doubt that a very large proportion of these had an ante-natal cause, that is, they resulted directly from the unhealthy condition of one or both parents. The large number of deaths certified to be due to premature birth, marasmus, inanition, convulsions, &c., indicates this. A reduction in the number of such deaths cannot be expected until individuals recognise that as they are so their children will be and recognising this will lead healthy lives.

It is a matter for congratulation that Education Authorities have at last realised the necessity of teaching cooking and house-work. Much of the unhealthy condition existing proceeds from lack of nourishment, not from lack of means to obtain that nourishment but of lack of knowledge of the feeding value of the various foods and of the best means of so cooking foods as to render them digestible. This teaching requires to be carried further, general hygiene should be taught practically.

### Future Action.

(1) Such alterations and additions to the Sanatorium as will permit of the work connected with the isolation and treatment of patients being carried out in an efficient manner.

A meeting of the Sanitary Committee was held at the hospital to consider certain suggested alterations. At a meeting of the Council held shortly afterwards it was decided not to carry out the suggestions.

The bedroom accommodation for the nurse is inadequate, she having to sleep in one of the wards provided for patients which at times is occupied by patients. The means of obtaining hot water for baths, &c. (viz. the use of a pan on a small fire) is absolutely insufficient. No ambulance is provided, patients being removed in a hired cab.

(2) The substitution of water-closets for conveniences with fixed receptacles. It was recommended that certain conveniences of this kind at Carlin How be abolished and water-closets substituted; the recommendation was adopted but owing to various causes the work has been delayed; the Surveyor informs me that it will be proceeded with shortly.

(3) The bi-weekly scavenging of nightsoil pails and the weekly of fixed receptacles during the summer months.

This part of the report would not be complete without a reference to remarks made in previous years as to the necessity of *individual* action, remarks no less needed now than then. Inspections and special visits made show that in many houses the most elementary laws of health are unfulfilled,—domestic and personal cleanliness being neglected, ventilation of bedrooms more honoured in the breach than the observance, sunlight excluded by drawn blinds, &c. In too many instances little attempt is made to maintain conveniences in a cleanly condition, lime-washing of the walls of these is very rarely done. Reform of the conditions under the control of the individual is as requisite as that depending on the action of the local authority.

Table IV.  
Infant Mortality.

1913. Nett Deaths from stated causes at various Ages under 1 Year of Age.

CAUSE OF DEATH.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks & under 3 months.	3 months & under 6 months.	6 months & under 9 months.	9 months & under 12 months.	Total Deaths under 1 year.
All causes	Certified	All	Uncertified.							
Small-pox	...	...								
Chicken-pox	.	..								
Measles	...	...	...						1	2
Scarlet fever...	..	..								3
Whooping-Cough	...	...								
Diphtheria and Croup	...									
Erysipelas	...	...	..							
Tuberculous Meningitis	...									
Abdominal Tuberculosis	...									
Other Tuberculous Diseases										
Meningitis (not Tuberculous)										
Convulsions	...	...		1		1	1	2	1	1
Laryngitis	...	...								
Bronchitis	..	..							1	1
Pneumonia (all forms)	...									
Diarrhoea	...	...						1		1
Enteritis	...	...				1	1	1	1	3
Gastritis	..	..			1		1	2	2	7
Syphilis	...	..								
Rickets	...	..								
Suffocation, overlying	...									
Injury at birth	...	...								
Atelectasis	..	..								
Congenital Malformations	...								1	1
Premature birth	..	...	4	1			5	2		7
Atrophy, Debility and Marasmus	...	..	3			1	4	3		7
Other Causes	...	..						1		1
Nett Births	$\left\{ \begin{array}{l} \text{legitimate} \\ \text{illegitimate} \end{array} \right. \begin{array}{l} 267 \\ 12 \end{array} \right\}$		279		Nett Deaths	$\left\{ \begin{array}{l} \text{legitimate infants} \\ \text{illegitimate infants} \end{array} \right. \begin{array}{l} 34 \\ 3 \end{array} \right\}$		37		

Saltburn,  
March 28th, 1914.

I am, Gentlemen,  
Yours obediently,  
W. W. STAINTHORPE.

## ADDENDUM.

Since this report was printed I have received from the Local Government Board a copy of a report on the Statistics of the Incidence of Infectious Diseases in England and Wales during the year 1913.

In an accompanying circular the Medical Officer says "It is hoped that you will utilise "these statistics in comparing your own with other districts similarly circumstanced in the same "county, and with other districts in other counties."

The factors influencing the prevalence of infectious diseases vary so much as to render it difficult to make a true comparison between one district and another. An urban district with its population massed together cannot be compared with one in which the population is scattered over a wide area. A town in which the inhabitants are mainly employed in some industry cannot be compared with one the inhabitants of which are chiefly of the commercial class. The proportion of children to adults may be much larger in one district than another; unless the proportion be known a true comparison cannot be made. One district differs from another as regards the importation of infection from without. A large number of the residents in Redcar travel to and from neighbouring towns daily, a number of children attend schools outside the district, a very large number of visitors (season and day) come into it during the summer: it is thus specially open to the importation of disease and therefore cannot be compared with any district where the conditions named do not prevail. As to scarlet fever and diphtheria no true comparison can be made unless the figures used are the average of a period of years. One district may have an epidemic one year with the result that the number of cases in the following years (4 or 5) is small. The next year another district may be subject to an epidemic.

Guisborough Rural district has the unenviable position of having the highest attack rate from scarlet fever of any rural district in the North Riding and only one *urban* district in the Riding is higher. Redcar has this unenviable position so far as regards diphtheria, it having the highest attack rate in the whole of the Riding.

The attack rate from enteric fever in the Administrative County (North Riding) was 0·19 per 1000,—in the Guisborough Union it was 0·06.

W. W. STAINTHORPE.

